

CURRENT LITERATURE.

A notable collection of Hepaticæ.¹

Dr. Richard Spruce, whose work on the Hepaticæ of the Amazon and the Andes of Peru and Ecuador² forms the most elaborate and extensive work in systematic hepaticology in recent times, has supplemented this work by issuing the most extensive series of exsiccata that has yet appeared among the Hepaticæ. The series represents the arduous labors of Dr. Spruce in the Andes and the valley of the Amazon, where he spent fifteen of the best years of his life in a study of that equatorial flora. It numbers 478 specimens, finely preserved, mostly in a fruiting condition, or at least with perianths which furnish most available taxonomic characters, and in abundant quantity. It will be well for those whose hepatic horizon is limited by the structure of *Marchantia polymorpha*, and who conceive it to be a representative hepatic, to take notice that of the above number less than a dozen are of the marchantiaceous type, and there is even a smaller representation of the other thallose groups of which *Anthoceros* and *Riccia* are types, while the foliose *Jungermaniaceæ* constitute the great bulk of the series. The great genus *Lejeunea* alone with its formidable array of sub-genera appears under 175 numbers. The student who sees only the depauperate remnant of this genus as represented in temperate latitudes, fails to form any conception of its extent or true character; some of the forms are truly luxuriant, and the diversity presented by extreme types is at first glance a point in favor of generic instead of sub-generic division of the genus; further study, however, reveals a closeness that precludes this unless it be for convenience, which is at best a weak ground for the establishing of genera.

The further study of the collection has enabled Dr. Spruce to correct some references of species that were made in his monograph, and a number of new species appear which are not accompanied by descriptions, and hence are *nomina nuda* until published, which the good Doctor will doubtless attend to at once. To show the relative number of the species of the monograph which are represented in the exsiccatae we have made the following comparisons in the genus *Plagiochila* which, next to *Lejeunea*, is the largest and most representative of the South American flora. Sixty-nine species were described in the monograph, of which thirty-nine were described as new by Dr. Spruce; in the exsiccatae sixty-eight species appear, of which fifty

¹Hepaticæ Spruceanæ Amazonicæ et Andinæ, annis 1849-1860 lectæ. London, 1892.

²Trans. Bot. Soc., Edinb., xiv, 1-590, t. i-xxii (1885).

three are of the number described in the monograph, but representations of eleven of Spruce's new species are lacking. Of the fifteen species remaining, seven are now issued as new species, while the other eight represent species previously described by others.

The present work is a crowning effort of a busy life now turning seventy-five years. Long may its author be spared to complete other problems in the systematic study of his favorite group of plants.

L. M. U.

Two monographs on Characeæ.

Within a very short time of each other there have come to our table the first fascicle of each of two monographs dealing with the Characeæ of widely separated localities, namely, America and Australasia; the one by Dr. T. F. Allen, of New York City, the other by Otto Nordstedt, of the University of Lund, Sweden.¹

The first part of Dr. Allen's Characeæ of America received high commendation. It is quoted in the introduction to Norstedt's present work as furnishing "the best introduction, in English, to the anatomy, morphology, and classification of the order." The illustrations in the present fascicle of part II, which are always the part of such a work first scanned, are very well executed. Six of them are photo-engravings by the half-tone process (erroneously spoken of in the text as "photogravures") representing mounted specimens of the plants half or full size, while the eight lithographic plates represent the habit of single plants and details of the fruit and leaves. It is unfortunate that the plates are not numbered; and it would seem that the photo-engravings deserved to have the name of the species inserted on the press rather than with a rubber stamp.

Of the character of the text we are not competent to speak except on general principles, and on these it would seem to be open to adverse criticism. And first as to typography: Dr. Allen should select and adhere to some uniform scheme for each description, and by style of type and arrangement of matter make it easier for the eye to catch the items that are sought. For instance: in one place the list of synonyms is indented, in another they are flush with the name of species; in one place we have "NITELLA OBTUSA, *Spec. nov.*," in another "NITELLA MONTANA, *Sp. nov.*," and in a third NITELLA MISSOURIENSIS, *N. SP.*," in one description occurs a list of "LOCALITIES," while in the remainder they are embodied in the general text with no heading.

¹ ALLEN, TIMOTHY F.—The Characeæ of America, part II, fascicle I. Roy. Soc., pp. 8, pl. 14. The author: New York. \$1.00.
NORDSTEDT, OTTO.—Australasian Characeæ described and figured. Part I. 4to. pp. 24, pl. 10. Friedländer & Sohn: Berlin, 1891. 7 shillings.

Such things as this, together with the lack of uniformity in the capitalization of names and the abundant typographical errors, mar the appearance of the text very much.

It would seem, in the second place, to one not a student of this group, that there was a great lack in uniformity of description of the species. Contrasted characters, or description of the same points in each species, seem to us almost indispensable for sure identification. Moreover, in modern descriptions of Characeæ we notice that measurements abound, and it would seem that additional data of this kind should be given.

These criticisms may seem trivial; but if heeded we believe that the work, which we have long looked forward to, will be even more useful than it now promises to be; and it goes without saying that every one who undertakes to name these plants must have it in his library. It is privately published and we hope the author will be liberally patronized.

Turning to the Australian work, which comes to us through the courtesy of Baron Müller, we remark that its size permits more letter press as well as larger and handsomer plates, though for practical purposes probably not better. In the text, however, we have much better arrangement and typography, as well as fuller descriptions, which are English. A key to the species of *Nitella* would have been useful, though probably impossible at present, from the mode of publication and the imperfection of collections. Mr. Nordstedt has undertaken the work at the solicitation of Baron Müller, who has done so much to make known the Australian flora.

It is to be hoped that both of the important monographs thus begun will be rapidly pushed toward completion.

NOTES AND NEWS.

A NEW *Cycas* from the island of Formosa is described and figured in the January number of the *Journal of Botany*.

DR. GEORGE VASEY died at his residence in Washington, March 4th. A biographical sketch will appear in an early number of the *GAZETTE*.

MR. F. V. COVILLE, heretofore Assistant Botanist in the Department of Agriculture, has been appointed chief of the Division of Botany, vice Dr. Vasey, deceased.

RARE AMERICAN plants recently illustrated in *Garden and Forest* are *Galax aphylla* (Dec. 21), *Agave angustissima* (Jan. 4), *Aster binellus* (Jan. 11), and *Salix balsamifera* (Jan. 18).